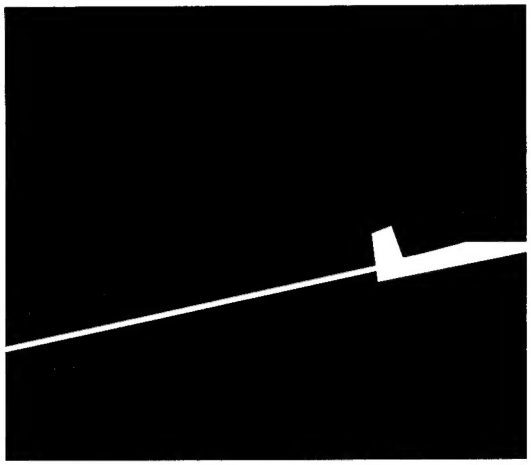

SIDAC

Supportability Investment Decision Analysis Center

Contract Number F33657-92-D-2055
CDRL Item A009, Data Item Mgmt-80057
Report No. SID/MR-95/0194
(Unclassified)

TASK ASSIGNMENT PLAN

for

Analysis of the Air Force Systems Modification Process & Policies

Prepared for

Major Randy Moller
HQ USAF/LGSI
1030 Air Force Pentagon
Washington, DC 20330-1030

Prepared by

Synergy, Inc.
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31 March, 1995

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This Task Assignment Plan will expain how Synergy, Inc. will support LGMM with a comprehensive review and analysis of the current Air Force (AF) modification process. The goal will be to minimize the time it takes for aquiring modification kits, administrative burden, AF oversight requirements and unnecessary contract requirements and costs. As a result, the reliability and maintainability (R&M) of the modifications process should be improved.

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on
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Prepared for

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13 March 1995

SIDAC
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Dear Special Projects Manager:

Contract F33657-92-D-2055
SIDAC Task No. 95
Delivery Order No. 0061
CDRL A009, Data Item MGMT-80057

The Task Assignment Plan for *Analysis of the Air Force Systems Modification Process & Policies* was originally delivered on October 1, 1994. I am sending another copy of this Task Assignment Plan since SIDAC apparently did not receive the original copy.

If you have any questions, please contact me at 202-232-6261.

Sincerely,

Raymond L. Reed
Task Leader

c: DCMAO (Mr. Leon Sulton) Letter Only
SIDAC (Mr. Heston Hicks)

Synergy, Inc.
763 Columbia Road, NW
Washington, DC 20009
202-232-6261
FAX: 202-232-8359

1 October 1994

Major Randy Moller
Logistics Analysis Team
HQ USAF/LGSI
1030 Air Force Pentagon
Washington, DC 20330-1030

Dear Major Moller,

Contract F33657-92-D-2055
Delivery Order No. 61
SIDAC Task No. 95
CDRL A009, Data Item MGMT-80057

Enclosed is the Task Assignment Plan for *Analysis of the Air Force Systems Modification Process & Policies* required under the above referenced contract.

If you have questions, please contact me at (202)232-6261.

Sincerely,

James A. Lutz
Task Leader

Enclosures

Contract No. F33657-92-D-2055/0061
SIDAC Task 95
CDRL A009, Data Item DI-MGMT-80057

(Unclassified)

TASK ASSIGNMENT PLAN
on
ANALYSIS OF THE AIR FORCE SYSTEMS MODIFICATION PROCESS & POLICIES

Prepared for

HQ USAF/LGSI
PENTAGON
Washington, DC 20330

1 October 1994

Prepared by

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TASK ASSIGNMENT PLAN
on
ANALYSIS OF THE AIR FORCE SYSTEMS MODIFICATION PROCESS & POLICIES

INTRODUCTION

Synergy will support LGMM with a comprehensive review and analysis of the current Air Force (AF) modification process. The goal will be to minimize the time it takes for acquiring modification kits, administrative burden, AF oversight requirements, and unnecessary contract requirements and costs. As a result, the reliability and maintainability (R&M) of the modifications process will be improved. Synergy will conduct this support through the use of a flow-chart. The tool used should allow LGM staff the ability to quickly search and locate specific topics. It should also indicate the critical paths and interfaces required to execute the modifications process. Field agencies will conduct similar analysis of the modification process. Their results will be incorporated into future recommendations for changing the modification process.

GOALS AND OBJECTIVES

Synergy will complete a comprehensive analysis of the Air Force modification process, document it, and provide recommendations to improve the process.

TECHNICAL APPROACH

In response to the statement of work, Synergy will develop an IDEF (Integrated Computer-Aided Manufacturing Definition Language) activity model. This is a structured analysis methodology used to describe activities and their associated data. Activities are described in the IDEF0 format (the Activity Model) and the data structures are described in the IDEF1x format (the Data Model). An IDEF analysis of an organization will focus on the methods of doing business that an organization employs toward its objectives. The objectives in this case are to minimize:

- ✓ The time it takes for acquiring modification kits
- ✓ Administrative burden
- ✓ AF oversight requirements
- ✓ Unnecessary contract requirements and costs

Synergy will develop an IDEF0 model for LGMM by doing the following:

1. **Preliminary Research** - Review current AF Modifications Process Documentation (AFM 63-XX & AFM 800-XX) to identify information that can be modeled, that is incolmplete, and that can not be modeled.

2. **Develop *AS-IS* IDEF0** - Analyze current AF modifications proccesses, using the documentation discussed in stage one and additional sources if necessary. Document these activites in an automated IDEF0 model called the *AS-IS*.

3. **Develop *TO-BE* IDEF0** - Keeping the above objectives in mind, describe how the AF modifications processes and activities should be executed. Document the recommended activities in an automated IDEF0 model called the *TO-BE*. This model will provide consistent and validated direction for an Implementation Plan.

4. **Develop Implementation Plan** - Provde a schedule and instructions for the re-design of the AF modifications process and the data elements needed to support that business.

PROJECT SCHEDULE AND MILESTONES

This technical approach is intended to provide LGMM with the flexibility to determine the eventual direction of the project. The Work Breakdown Structure (WBS) in figure 1 represents Synergy's proposed timeline for accomplishing the tasks associated with the statement of work. Decision points have been included in the WBS. At a decision point, Synergy will meet with LGM representatives to discuss the progress of the previous stage and what specific direction should be taken in following stages.

Synergy will apply the most experienced personnel on this project and will produce the best products possible within the time and funds allocated by the government. The Synergy program manager will prioritize the efforts for the tasks in order to make the most efficient and effective use of available resources.

DELIVERABLES

The following list of deliverables will be submitted for the efforts performed under this task:

(1) Final technical report on the task (CDRL A001). This report will provide analysis with a flow-chart of the modification planning and management process depicting the critical paths and time-lines, and a streamlined version (15-20 pages) of the manual.

(2) Periodic progress and status reports submitted every thirty (30) days throughout the duration of the contract (CDRL A004). These reports will keep the SIDAC COTR informed of the progress of the task on a monthly basis.

(3) The software necessary to complete the task (CDRL A006).

(4) Task Assignment Plan (CDRL A009). The plan presented in this document, which covers the objectives, technical approach, and schedule for performance of the statement of work.

PROJECT STAFFING AND EXPERIENCE

This project will be staffed with extremely well qualified personnel. The education, capabilities, and experience of key personnel are summarized here.

Mr. James A. Lutz, Program Manager, Ph.D. program in Mathematics/ graduate studies in operations research and statistics. He has over 20 years experience in logistics management, capability assessment, program and budget analysis, and operations analysis. As a member of Synergy's Operations Management Committee, he directs the performance of work on all Synergy contracts. He specializes in the development and application of quantitative models for analysis of policies in logistics management, budgeting, capability assessment, and R&M.

Mr. Raymond L. Reed, Sr. Logistics Management Specialist, M.S. Organic Chemistry. Mr. Reed has over 20 years experience in Air Force logistics. His areas of expertise include logistics management, tactical systems analysis, and acquisition management. He serves as the project manager for development and implementation of new parametric/interactive models, designed to perform logistics resource assessments of the U.S. Air Force's air mobility and air combat weapon systems. He will serve as the project manager for the tasking described in this document.

Mr. William E. Faragher, Sr. Scientist, M.A. Mathematics. Mr. Faragher has over 35 years experience in operations research, and logistics analysis. He is responsible for the software development for a suite of logistics assessment models designed for estimating the impact of budget decision on aircraft readiness and sustainability. He directed the development of a data base management system that imports data from a variety of sources and generates a set of output files for use in Synergy-developed logistics assessment models. Because of his strong scientific and mathematical background, he will serve this tasking on a consultory basis.

Ms. Lisa Lambie, Junior Operations Reserach Analyst, B.S.E. in Operations Research/ Engineering Management Systems, B.S.E. in Civil Engineering. She has several years experience in information systems analysis and development, including IDEF analysis and modelling. She provided analytical expertise and IDEF software support for the AF Asset Management IDEF project; and she was the lead analyst providing analytical and managerial expertise for the Marine Corps Asset Management IDEF project. Currently, Ms. Lambie is the task manager and lead analyst for various Synergy projects, involving the analysis of the AF Depot Maintenance process, including *AS-IS* and *TO-BE* activity modeling (IDEF0), data modelling (IDEF1x), information systems specifications and the development of a migration plan.

Ms. Giselle E. Valera, Administrative Assistant, B.A. International Relations. Ms. Valera has conducted an analysis of the AF's resource allocation process for PEY. This analysis used influence diagrams to show the inter-relationship between resources, and their costs, and weapon system readiness and sustainability. The effort served as a benchmark analysis within and across weapon systems. She is currently the task manager for the development and implementation of the tasking outlined in this document.

POINT OF CONTACT

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Figure 1 - Work Breakdown Structure